TENT COOPERATION TREATY

•	From the INTERNATIONAL BUREAU
PCT	То:
NOTIFICATION OF ELECTION (PCT Rule 61.2)	Assistant Commissioner for Patents United States Patent and Trademark Office Box PCT Washington, D.C.20231 ÉTATS-UNIS D'AMÉRIQUE
Date of mailing (day/month/year) 24 February 2000 (24.02.00)	in its capacity as elected Office
International application No. PCT/IB99/01323	Applicant's or agent's file reference PDC/AB/20762
International filing date (day/month/year)	Priority date (day/month/year)
14 July 1999 (14.07.99)	15 July 1998 (15.07.98)
Applicant DAUVOIS, Jean-Luc et al	
The designated Office is hereby notified of its election made in the demand filed with the International Preliminary 14 January 200 in a notice effecting later election filed with the International	Examining Authority on: 0 (14.01.00)
2. The election X was was not made before the expiration of 19 months from the priority de	ate or where Rule 32 applies within the time limit under

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Authorized officer

Christine Carrié

Telephone No.: (41-22) 338.83.38

Facsimile No.: (41-22) 740.14.35

Rule 32.2(b).

PATENT COOPERATION TREATY

From the INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

COZENS, Paul, Dennis Mathys & Squire MATHYS & 100 Gray's Inn Road London WC1X 8AL **GRANDE BRETAGNE**

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SCUL NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY

EXAMINATION REPORT

22/6/00 (PCT Rule 71.1)

Date of mailing (day/month/year)

19.05.2000

Applicant's or agent's file reference

PDC/AB/20762

International filing date (day/month/year)

Priority date (day/month/year) 15/07/1998

IMPORTANT NOTIFICATION

International application No. PCT/IB99/01323

14/07/1999

Applicant

CANAL+ SOCIETE ANONYME et al.

- 1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
- 2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
- 3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and fumish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Name and mailing address of the IPEA/

Authorized officer

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PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's o PDC/AB/2		nt's file reference	FOR FURTHER ACT	See Not Prelimin	ification of Transmittal of International ary Examination Report (Form PCT/IPEA/416)
nternational			International filing date (da	ny/month/year)	Priority date (day/month/year)
PCT/IB99			14/07/1999		15/07/1998
			ational classification and IPC		
104N7/16					
pplicant					
CANAL+	soc	IETE ANONYME et a	al.		
I. This in	nterna	ational preliminary exar	nination report has been p	repared by this I	nternational Preliminary Examining Authori
and is	trans	smitted to the applicant	according to Article 36.		
2. This F	REPO	RT consists of a total of	f 7 sheets, including this	cover sheet.	
□ ті	his re	port is also accompani	ed by ANNEXES, i.e. shee	ets of the descrip	otion, claims and/or drawings which have
be	een a	mended and are the ba	asis for this report and/or s	sheets containing	rectifications made before this Authority
(s	ee H	ule 70.16 and Section (607 of the Administrative I	nstructions unde	ine (O).
These	ann	exes consist of a total of	of sheets.		
3. This n	enort	contains indications re	lating to the following item	ıs:	
S. 71110 1	- -				
1	Ø	Basis of the report			•
		Priority	aninian with regard to no	velty inventive st	ep and industrial applicability
III IV		Lack of unity of inven		veny, mvenuve so	apparent,
V		Reasoned statement	under Article 35(2) with re	gard to novelty, i	inventive step or industrial applicability;
		citations and explana	tions suporting such state	ment	
VI		Certain documents c			
VII	⊠ M		international application	ation	
VIII	N.	Certain observations	on the international applic	allon	•
Date of sub	missi	on of the demand		Date of completion	n of this report
14/01/20	00		ļ	19.05.2000	
Name and	mailin	g address of the internatio	nal	Authorized officer	ASPECTES AST
	exam	ining authority:			
- M		opean Patent Office 0298 Munich		Loeser, E	
ارو	_	+49 89 2399 - 0 Tx: 5236	556 epmu d	, =	130

Telephone No. +49 89 2399 8482

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/IB99/01323

l. Basis o	f the re	port
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1. This report has been drawn on the basis of (substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.):

	uie i	eport since they di	o not contain amonaments.
	Des	cription, pages:	
	1-34		as originally filed
	Clai	ms, No.:	
	1-27	•	as originally filed
	Drav	wings, sheets:	
		95, 555151	
	1-8		as originally filed
2.	The	amendments have	e resulted in the cancellation of:
		the description,	pages:
		the claims,	Nos.:
		the drawings,	sheets:
3.		This report has be considered to go l	een established as if (some of) the amendments had not been made, since they have been beyond the disclosure as filed (Rule 70.2(c)):
4.	Add	litional observation	s, if necessary:

- V. Reasoned stat ment under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- 1. Statement

Novelty (N)
Yes: Claims 1-26
No: Claims 27

Inventive step (IS)
Yes: Claims 1-26
No: Claims 27

Industrial applicability (IA)
Yes: Claims 1-27

No:

2. Citations and explanations

see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

Claims

see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

1. General

The present application does not satisfy the criteria set forth in Articles 33(2) and 33(3) PCT because the subject-matter of claim 27, as far as it can at present be construed, is not new or not inventive in respect of prior art as required by the regulations (Rule 64.1-3 PCT). Moreover, the claims have deficiencies with respect to the requirements set out in Art. 6 PCT. Details of the objections are set out below.

Concerning Section VIII - Art. 6 PCT:

2.1. Lack of conciseness

The various definitions of the invention given in independent method claims 1 and 13 are such that the claims as a whole are not concise, contrary to Art. 6 and Rule 6.1(a) PCT.

The claims should include the minimum necessary number of independent claims in any one category, with dependent claims as appropriate. In the present case it is considered appropriate to use only one independent claim in any category.

Claims 1 and 13 appear to relate effectively to substantially overlapping subject-matter. The two claims differ from each other only with regard to the names assigned to the first and second devices, and with regard to the source from which the second device receives the certificate. It is considered that these two differences could be maintained without difficulty in a claim 13 that is made dependent upon claim 1.

2.2. Claims 7, 9-12, 24-25

As least some of the features in method claims 7, 9-12, and 24-26 relate to an apparatus rather than imposing any clear re-

strictions on the method itself, so that the requirement of clarity set out in Art. 6 PCT is not met.

2.3. Claim 27

Claim 27 fails to specify the technical features that are required to define the intended scope of protection. The claim therefore contravenes the requirements of clarity and provision of essential features set out in Art. 84 EPC.

Concerning Section V - Articles 33(2) and 33(3) PCT

The following documents is cited - the numbering will be adhered to in the rest of the procedure: D1: WO-A-97/38530.

3.1. Claim 1

The invention is applicable to a decoder and recorder for scrambled audio-visual signals. In particular, the invention pertains to a secure/encrypted communication link between two such devices.

D1 (abstract) anticipates the preamble of claim 1 and further discloses (in terms of claim 1, claimed features not disclosed being emphasized and put in angled brackets, comments being put in parentheses):

- - (D1, abstract: the second device 5 receives a first message comprising a <u>random</u> key Ci encrypted using a <u>conditional</u> access module CAM public key; the random key is generated and encrypted at the first device 4);

INTERNATIONAL PRELIMINARY Inte

- (b) the second device decrypting the certificate using an equivalent <management public> key (D1, abstract: the second device decrypting the first message using a <u>CAM secret</u> key to obtain the random key Ci);
- (c) the second device thereafter using the decrypted <transport public> key to encrypt information sent to the first device (D1, abstract: using the decrypted random key Ci);
- (d) the first device using the equivalent <(transport!) private> key to decrypt the information (D1, abstract: using the random key Ci that was sent in step a) in encrypted form from the first to the second device);

Hence, there are substantial differences between the disclosure of D1 and the subject-matter of claim 1. These differences do not appear to be disclosed in or to be obvious from the presently available prior art.

3.2. Claim 13

The findings set out in paragraph 3.1 above with regard to claim 1 correspondingly apply to claim 13.

3.3. Claim 27

The deficiencies of claim 27 with respect to Art. 6 PCT are such that the claimed subject-matter cannot be associated with novelty or an inventive step as required by Articles 33(2) and 33(3) PCT.

4. Concerning Section VII: Description and other belongings

4.1. Claim 27 is not cast in the two-part form as required by Rule 6.3(b) PCT.

- 4.2. The claims are not complemented with reference signs as required by Rule 6.2(b) PCT.
- 4.3. At least some of the dependent claims, such as apparatus claims 5, 7-10, 12 are multiple-dependent (alternatively dependent) on claims (eg on claim 3) which themselves are multiple-dependent claims. Accordingly, the requirements set out in Rule 6.4(a) PCT are infringed.
- 4.4. Document D1 is not cited in the description, and the relevant passages of D1 are not summarized in the description.



(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER see Notification of	of Transmittal of International Search Report
PDC/AB/20762	ACTION (Form PCT/ISA/2	20) as well as, where applicable, item 5 below.
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
PCT/IB 99/01323	14/07/1999	15/07/1998
Applicant		·
CANAL+ SOCIETE ANONYME et	-1	
CANALY SOCIETE ANONTHE EL	al.	
This International Search Report has been	prepared by this International Searching Auth	and in America de la America de la Companya de la C
according to Article 18. A copy is being tra	nsmitted to the International Bureau.	ionly and is transmitted to the applicant
This International Search Report consists	of a total of 3 sheets.	
	a copy of each prior art document cited in this	report.
Basis of the report		
a. With regard to the language , the i	nternational search was carried out on the bas	sis of the international application in the
language in which it was filed, unk	ess otherwise indicated under this item.	
the international search was Authority (Rule 23.1(b)).	as carried out on the basis of a translation of the	ne international application furnished to this
With regard to any nucleotide and was carried out on the basis of the	d/or amino acid sequence disclosed in the in	ternational application, the international search
r 🖂	nal application in written form.	
filed together with the inter	mational application in computer readable form	n.
	this Authority in written form.	
the statement that the sub	this Authority in computer readble form. sequently furnished written sequence listing do	oes not no beyond the disclosure in the
international application as	s filed has been furnished.	
furnished	rmation recorded in computer readable form is	identical to the written sequence listing has been
2. Certain claims were four	d unsearchable (See Box I).	
3. Unity of invention is lack	ing (see Box II).	
4. With regard to the title ,	·	
X the text is approved as sut	omitted by the applicant.	
——————————————————————————————————————	ned by this Authority to read as follows:	
5. With regard to the abstract,		
the text is approved as sub		
within one month from the	ed, according to Rule 38.2(b), by this Authority date of mailing of this international search repo	y as it appears in Box III. The applicant may, ort, submit comments to this Authority.
6. The figure of the drawings to be public		8:
as suggested by the applic		None of the figures.
because the applicant faile	d to suggest a figure. characterizes the invention.	
because this rightle better (Maracterizes the invention.	

International Application No PCT/IB 99/01323

A. CLASSIFICATION OF SUBJECT IPC 7 H04N7/167 H04L29/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

 $\begin{array}{ll} \mbox{Minimum documentation searched (classification system followed by classification symbols)} \\ \mbox{IPC 7} & \mbox{H04N} & \mbox{H04L} & \mbox{G06F} \end{array}$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

	ENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 97 38530 A (DIGCO B V ;RIX SIMON PAUL ASHLEY (ZA); GLASSPOOL ANDREW (GB); DAVI) 16 October 1997 (1997-10-16)	1,3,5,6, 12,13,
Y		26,27 10,11, 24,25
	page 1, line 19 — line 26 page 4, line 1 —page 5, line 10 ———	
Υ .	US 5 748 732 A (LE BERRE JACQUES ET AL) 5 May 1998 (1998-05-05)	10,11
А	column 1, line 17 -column 2, line 16 column 3, line 23 - line 35	9
	column 3, line 64 -column 4, line 43	
	-/	
	·	

χ Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents :	"T" later decument published after the international filling data
A document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled
P document published prior to the international filing date but later than the priority date claimed	in the art. "&" document member of the same patent family
Date of the actual completion of the international search	Date of mailing of the international search report
29 October 1999	05/11/1999
Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Sindic, G

Form PCT/ISA/210 (second sheet) (July 1992)

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International Application No PCT/IB 99/01323

	uation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	WO 97 35430 A (NEWS DATACOM LTD ;TSURIA YOSSEF (IL)) 25 September 1997 (1997-09-25) page 3, line 1 -page 4, line 16	10,11
Y	"ENCRYPTION OF INFORMATION TO BE RECORDED SO AS TO PREVENT UNAUTHORIZED PLAYBACK" RESEARCH DISCLOSURE, no. 335, 1 March 1992 (1992-03-01), page 219 XP000301128 ISSN: 0374-4353 the whole document	24,25
A	FORD W ET AL: "PUBLIC-KEY CRYPTOGRAPHY AND OPEN SYSTEMS INTERCONNECTION" IEEE COMMUNICATIONS MAGAZINE, vol. 30, no. 7, 1 July 1992 (1992-07-01), pages 30-35, XP000307910 page 2, paragraph 5	1,13,27
Α	FR 2 732 537 A (CANAL PLUS SA) 4 October 1996 (1996-10-04) page 2, line 12 -page 3, line 23	13,18
A	US 4 633 309 A (LI TONY C ET AL) 30 December 1986 (1986-12-30) column 2, line 36 - line 68	9

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information on patent family members

International Application No PCT/IB 99/01323

Patent document cited in search repo		Publication date		atent family nember(s)	Publication date
WO 9738530	Α	16-10-1997	AU CA CN EP HR	2506397 A 2250833 A 1215528 A 0891670 A 970160 A	29-10-1997 16-10-1997 28-04-1999 20-01-1999 28-02-1998
US 5748732	A	05-05-1998	FR EP JP	2730372 A 0726676 A 8251569 A	09-08-1996 14-08-1996 27-09-1996
WO 9735430	A	25-09-1997	IL AU EP GB	117547 A 1317597 A 0826288 A 2311451 A,B	14-07-1999 10-10-1997 04-03-1998 24-09-1997
FR 2732537	Α	04-10-1996	NONE		
US 4633309	Α	30-12-1986	CA	1250656 A	28-02-1989